must be published in the FEDERAL REGISTER and the material made available to the public. All approved material is on file at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC and at the U.S. Coast Guard, Office of Operating and Environmental Standards (G–MSO), 2100 Second Street, SW., Washington, DC 20593–0001, and is available from the sources indicated in paragraph (b) of this section.

(b) The material approved for incorporation by reference in this part, and the sections affected are:

American Petroleum Institute (API), 1220 L Street NW., Washington, DC 20005
- API Standard 2000, Venting Atmospheric and Low-Pressure Storage Tanks (Nonrefrigerated and Refrigerated), Third Edition, January 1982 (reaffirmed December 1987) 39.20–11

American National Standards Institute (ANSI), 11 West 42nd Street, New York, NY 10036
- ANSI B16.5, Steel Pipe Flanges and Flanged Fittings, 1981 ... 39.20–1

American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959
- ASTM F1271—Standard Specification for Spill Valves for Use in Marine Tank Liquid Overpressure Protection Applications, December 29, 1989 39.20–9

International Electrotechnical Commission (IEC), Bureau Central de la Commission Electrotechnique Internationale, 1 rue de Varembe′, Geneva, Switzerland
- IEC 309–1—Plugs, Socket-Outlets and Couplers for Industrial Purposes: Part 1, General Requirements, 1979 ..... 39.20–9
- IEC 309–2—Plugs, Socket-Outlets and Couplers for Industrial Purposes: Part 2, Dimensional Interchangeability Requirements for Pin and Contact-tube Accessories, 1981 ..... 39.20–9

National Electrical Manufacturers Association (NEMA), 2101 L St. NW., Washington, DC 20036
- ANSI/NEMA WD6—Wiring Devices, Dimensional Requirements, 1988 ..... 39.20–9

National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, MA 02269
- NFPA 70—National Electrical Code, 1987 ..... 39.20–9

Oil Companies International Marine Forum (OCIMF), 15th Floor, 96 Victoria Street, London SWIE 5JW, England
- International Safety Guide for Oil Tankers and Terminals, Third Edition, 1988 ..... 39.30–1

[CGD 88–102, 55 FR 25446, June 21, 1990, as amended by CGD 95–072, 60 FR 50462, Sept. 29, 1995; CGD 96–041, 61 FR 50727, Sept. 27, 1996; CGD 97–057, 62 FR 51043, Sept. 30, 1997]

§ 39.10–9 Vessel vapor processing unit—TB/ALL.

Each vessel which has a vapor processing unit located on board must meet the requirements of 33 CFR part 154, subpart E to the satisfaction of the Commandant (G–MSO) in addition to complying with the requirements of this part.

[CGD 88–102, 55 FR 25446, June 21, 1990, as amended by CGD 95–072, 60 FR 50462, Sept. 29, 1995; CGD 96–041, 61 FR 50727, Sept. 27, 1996]

§ 39.10–11 Personnel training—TB/ALL.

(a) A person in charge of a transfer operation utilizing a vapor collection system must have completed a training program covering the particular system installed on the vessel. Training must include drills or demonstrations using the installed vapor control system covering normal operations and emergency procedures.

(b) The training program required by paragraph (a) of this section must cover the following subjects:

(1) Purpose of a vapor control system;

(2) Principles of the vapor control system;

(3) Components of the vapor control system;

(4) Hazards associated with the vapor control system;

(5) Coast Guard regulations in this part;

(6) Operating procedures, including:

(i) Testing and inspection requirements,

(ii) Pre-transfer procedures,

(iii) Connection sequence,

(iv) Start-up procedures, and

(v) Normal operations; and

(7) Emergency procedures.

[CGD 88–102, 55 FR 25446, June 21, 1990; 55 FR 39270, Sept. 26, 1990]

§ 39.10–13 Submission of vapor control system designs—TB/ALL.

(a) Plans, calculations, and specifications for a new vessel vapor collection system must be submitted to the Marine Safety Center for approval prior to installation.

(b) An existing vapor collection system installation that has been Coast Guard approved to transfer cargo vapor to specific facilities must be reviewed and approved by the Marine Safety Center prior to transferring vapors to other facilities.

(c) The owners/operators of a foreign flag vessel may submit certification by the classification society which classes the vessel that the vessel meets the requirements of this part as an alternative to meeting the requirements in paragraphs (a) and (b) of this section.

(d) Upon satisfactory completion of plan review and inspection of the vapor collection system or receipt of the certification provided for in paragraph (d) of this section, the Officer in Charge, Marine Inspection, shall endorse the Certificate of Inspection for U.S. flag vessels, or the Certificate of Compliance for foreign flag vessels, that the vessel is acceptable for collecting the vapor from crude oil, gasoline blends, and benzene, or any other vapor it is found acceptable to collect.

[CGD 88–102, 55 FR 25446, June 21, 1990, as amended by CGD 95–028, 62 FR 51200, Sept. 30, 1997]

Subpart 39.20—Design and Equipment

§ 39.20–1 Vapor collection system—TB/ALL.

(a) Each vapor collection system must meet the following requirements:

(1) Except as allowed by paragraph (a)(3) of this section or the Commandant (G–MSO), vapor collection piping must be permanently installed, with the vessel's vapor connection located as close as practical to the loading manifold;

(2) If the vessel collects vapors from incompatible cargoes simultaneously, it must keep the incompatible vapors separate throughout the entire vapor collection system;

(3) A vessel certified to carry cargo listed in Table 151.05 of part 151 or Table 1 of part 153 of this chapter may have vapor connections located in the vicinity of each tank in order to preserve segregation of cargo systems, in lieu of common header piping;

(4) A means must be provided to eliminate liquid condensate which may collect in the system, such as draining and collecting liquid from each low point in the line;

(5) Vapor collection piping must be electrically bonded to the hull and must be electrically continuous; and

(6) An inerted tankship must have a means to isolate the inert gas supply from the vapor collection system. The inert gas main isolation valve required by SOLAS 74, as amended, chapter II–2, Regulation 62.10.8 may be used to satisfy this requirement.

(b) The vapor collection system must not interfere with the proper operation of the cargo tank venting system.

(c) An isolation valve capable of manual operation must be provided at the vessel vapor connection. The valve must have an indicator to show clearly whether the valve is in the open or closed position, unless the valve position can be readily determined from the valve handle or valve stem.

(d) The last 1.0 meter (3.3 feet) of vapor piping before the vessel vapor connection must be:

(1) Painted red/yellow/red with:

(i) The red bands 0.1 meter (0.33 feet) wide, and

(ii) The middle yellow band 0.8 meter (2.64 feet) wide; and

(2) Labeled ''VAPOR'' in black letters at least 50 millimeters (2 inches) high.

(e) Each vessel vapor connection flange must have a permanently attached 0.5 inch diameter stud at least 1.0 inch long projecting outward from the flange face. The stud must be located at the top of the flange, midway between bolt holes, and in line with the bolt hole pattern.

(f) Each hose used for transferring vapors must: